

Making Homemade Wine

By Robert Cluett



Garden Way Publishing Bulletin A-75

Illustrations by Sue Storry

ABOUT THE AUTHOR

*Robert Coletti teaches English at York University, makes squash, is the author of *Prose Style* and *Critical Reading*, and makes many gallons of wine a year.*

All rights reserved — no part of this bulletin may be reproduced in any form without permission in writing from the publisher, except by a reviewer who wishes to quote brief passages in connection with a review written for inclusion in a magazine or newspaper.

COPYRIGHT © 1981

by

STOREY COMMUNICATIONS, INCORPORATED

**GARDEN WAY PUBLISHING
POWNAL, VERMONT 05261**

Printed in the United States

Making Homemade Wine

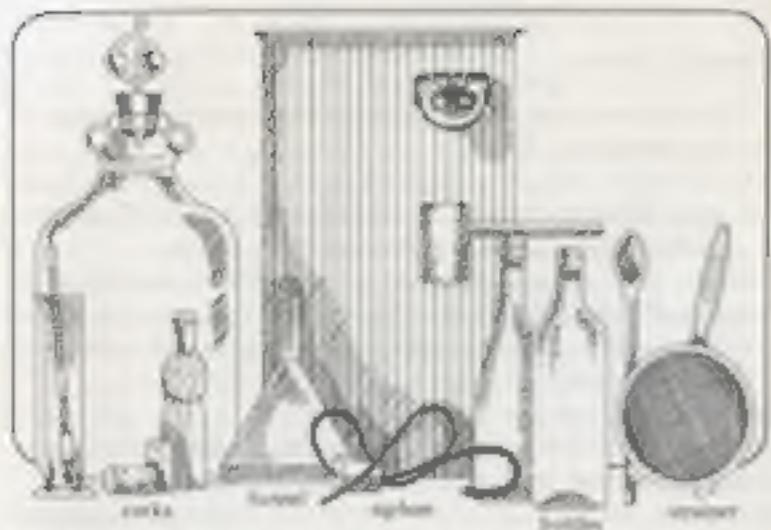
by Robert Cluett

Wine is probably the most ancient and widespread alcoholic drink. It has been around at least several thousand years, as the literature of both the ancient Greeks and Hebrews tells us. Today, alcohol is available in a wide variety of forms: wines, beers, and distilled spirits. But it is wine that is the most popular with home brewers.

Wine is the easiest alcohol to make. It does not require the fastidious temperature control involved in brewing beer. Unlike distilled spirits, it requires no still and does not invite the curiosity of the revenue agents — unless you undertake to sell the wine you produce, and we do not recommend doing that. You can make fine wines from grapes or other fruits, or you can make it from vegetables, grains, or flowers.

This bulletin will take the mystery out of making wine. We will teach you the language of winemakers and explain what ingredients and equipment are essential to the process. We will offer some reliable and delicious wine recipes, and we will tell you the cure and prevention of 11 common problems — in case anything goes wrong with your wine. But we don't expect anything to go wrong. So, enjoy!

As with any specialty, winemaking has a language all its own. Before we go any further, let me introduce you to some of the terms you will come across in the text.



Basic winemaking equipment

De-stemmer: For taking stems off fresh grapes. A large wooden spaghetti server makes an adequate substitute.

Filter and pump: These are used as a last-ditch method of clarification. I have used one once in 200 batches of homemade wine.

Gallon jugs: These are useful in the stage between carboy and bottle. Sometimes restaurants give them away.

Vinometer: Measures alcohol in wines that are fermented out and dry; it is not useful for wines with residual sugar in them.

Wine press: Device for pressing fruit either before or at the end of the first fermentation in the vat. It is necessary if you are making over 100 gallons a year of fresh grape or fresh fruit wine.

Ingredients

Listed below are the ingredients you will need, in addition to fruit, to make wine at home.

Essential Ingredients — Long Shelf-Lives

Acid blend: Raises acidity level of low-acid must and flabby finished wine.

Campden Tablets: Disinfects fresh must and wines during racking.
Disinfectant: Solution of water and potassium metabisulfite crystals, kept in gallon jug. Absolutely essential for cleanliness.
Grape tannin powder: Enhances the flavor and gassiness of cider, perry, and wines made from concentrates.

Essential — But Perishable — Ingredients

Pectic enzymes: Removes the pectic haze from fruit wines and is put into the must just before yeast. It has a 3-month shelf life.
Yeast culture, liquid or powdered: Essential to fermentation, the yeast organisms turn sugar to alcohol. It has a one-year shelf life if kept unopened in the original sealed jar or packet.

Optional Ingredients

Tinings: A powder used to remove microscopic particles that cloud wine.
Glycerine: Adds finish to table wines.
Oak chips: For adding barrel taste, especially to red wines.
Pure unflavored grain or grape alcohol: Fortifies port, sherry, and Madeira.
Sorbic acid (potassium sorbate): Stabilizes the wine before bottling.
Vitamin C tablets, 250 mg: Protects white wines from oxidation.

Basic Techniques of Winemaking

There are only 4 requirements for successful winemaking.

- The weight or sugar content should be enough to read 1.060 to 1.080 on a hydrometer scale. (All hydrometer readings in this book are given in the form of specific gravity (SG), that is, a fraction of the weight of water.)
- The acidity of your must should measure .35 to .40 percent to prevent early deterioration. Obtain this reading with your titration kit.
- Proper temperature must be maintained. During the first 10 days of fermentation, the temperature of the must should measure

• If fruit pulp sticks to your gear, use a plastic abrasive pad and hot water to remove it.

• When putting away your primary fermenters for a while, rinse with sulfite solution, cover with a plastic sheet, and secure with a tight string.

Preparing the Fruit

After you have removed all the stems and leaves from your washed fruit, it is ready for crushing. You can use a commercially available crusher for this stage, or you can improvise with a large plastic container and wooden mallet. With white grapes, as well as with many tree fruits, press out the vegetable matter in a press, so the must consists of nothing but juice. With red grapes, you will ferment first for 5 to 10 days and then go to the press. If you are making no more than 35 or 40 gallons a year, you can use a medium-mesh or fine-mesh nylon bag to get the effect of a pressing. Just crush your fruit in the bag, then squeeze the juice out.



The Garden Way cider press can be used to crush fruit for juice.

Add hot water and other ingredients (see recipe section) to the crushed fruit, and you will have a must, or a liquid that is nearly ready to ferment. Add to the must some Campden Tablets, which will keep it free from debilitating organisms.

Testing the Must

First, test the must with a hydrometer. If the must weight is between 1.080 and 1.095, you won't want to tinker. If it is below 1.080, you will want to add sugar; if it is above 1.095, you will probably want to cut the must somewhat with water, unless you want a very sweet or alcoholic wine. Temperature has a large effect on specific gravity readings, and hydrometers are calibrated to be accurate when the must is at 60 or 68 degrees F.

Next, test the must for acidity with a titration kit. If it is a red must and the acidity is .65 percent, or a white must and the acidity is .75 percent, you will be happy indeed. If your acidity is too low, add an acid blend (citric, malic, or tartaric). Wish shipped Califor-



Measure specific gravity with a hydrometer. Some hydrometers are calibrated to read accurately at 60 degrees F., others at 68 degrees F. Make sure you are reading your hydrometer at the proper temperature. To read a hydrometer, ignore the way the liquid curves against the stem and tube because of surface tension, and take the reading from the level portion of the liquid.

non grapes, the natural acidity will be too low. If it's too high (and with Eastern grapes, it may well be), you may want to cut the must somewhat with a sugar and water solution of weight 1.090, or with a dilute low-acidity must made from a hot-climate concentrate (also available from wine-supply stores). Some of my friends ferment their Eastern grapes at a natural acidity of 1.5 percent, but they are patient people: that kind of acidity level makes for either a disagreeable little wine or a long wait — about 5 years (wine loses acidity over time).

You can get to this stage of the process much more quickly and easily by using a grape concentrate from a winemakers supply store or by using grape juice shipped to a juicer in your nearest urban area. You should not be put off by previous unhappy experiences with concentrates. In the last few years, Wine-Art Ltd. of Toronto, a marketer of home wine products, has been selling concentrates from Australia that make wines indistinguishable from those made with fresh grapes.

Adding the Yeast Culture

The last item of preparation is adding a yeast culture, which should have been mixed with a starter solution 2 to 3 days before the must was crushed or put together. Here is a formula for starting yeast for a 5-gallon batch of wine.

3 ounces frozen orange juice concentrate
24 ounces water
6 ounces sugar
2 rounded teaspoons of ordinary yeast nutrient

Put the frozen orange juice, water, and sugar into a 2-quart saucepan, and bring the mix to a boil on the stove. When the mix boils, remove it from the heat, add the nutrient, and cover the pot until the mix cools to room temperature.

Transfer the starter mix to a sterilized 1-gallon jug, add the yeast culture, and stopper the jug with an air lock. After 24 to 36 hours, "islands" of active yeast should appear on the surface of the liquid. Give the jug a swirl every 6 to 8 hours. When the solution gets to an active ferment (much CO₂ is expelled through the air lock when you swirl), it is ready to add to the must.

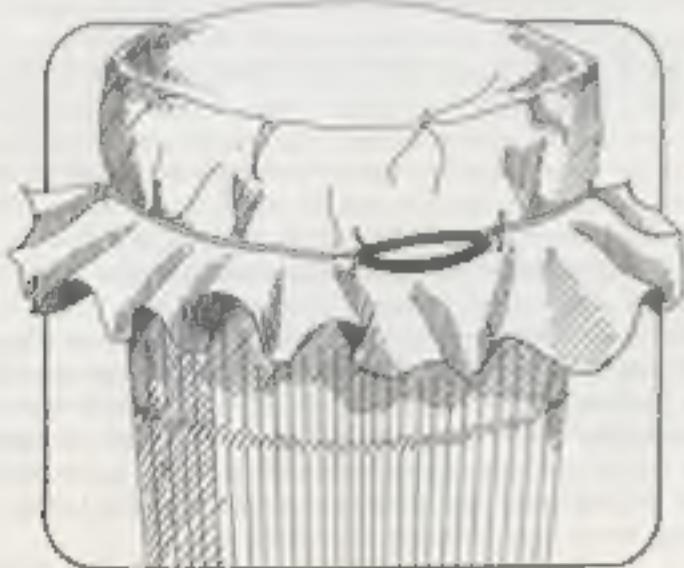
Always prestart your yeast for any batch of wine 3 gallons or

more. The recipe given above will handle any quantity of wine from 3 to 12 gallons. For larger quantities you will want to double, triple or quadruple the recipe. For smaller quantities, add the yeast culture directly to the must from vial or packet, since the smaller quantities of must will dilute the culture less than larger ones.

Primary Fermentation

After you have adjusted weight and acidity, and added a yeast culture, the vat in which this first (primary) fermentation goes on should be covered with a tight-fitting plastic sheet, fastened with string. Once a vigorous, rolling ferment is started (24 to 48 hours), stir the must and push down the "cap" (the vegetable crust that will form on the top) twice a day. Use a well-sterilized wooden spoon.

Weigh the must every day after the third day, to see how rapidly the fermentation is going. A weight loss of .007 to .015 per day is good, more than that indicates that the must should be moved to a cooler place.



To secure the plastic sheet over the primary fermenter, I have invented an elasticized fastener I call "Chart's String." I take a string that is 4 inches shorter than the circumference of my primary fermenter. Then, I tie the string to a 3-inch rubber band. This makes an easy-to-use string that secures a tight cover over the fermenter.

Test the must frequently with your best piece of winemaker's test equipment — your nose. The smell of a fermenting must is pervasive, at least in the space in which it is fermenting, sometimes throughout the house. If there is an aroma in addition to those of fruit and CO₂ coming from the wine, do not be disturbed unless that aroma has a strong sulphur or vinegar cast to it. In that case, turn to our troubleshooting section, pages 19 to 21.

When the weight reaches 1.025 to 1.030, transfer the wine to glass carboys with a siphon and J-tube. If you are making a red wine, press out the residual fruit left in the fermenting vat. (Here again, the nylon bag is a useful alternative to a press.) Stopper the carboys with air locks filled with sulfite solution to permit CO₂ to escape and prevent air contact with the wine. Leave the wine in the primary fermenter for 5 to 10 days.

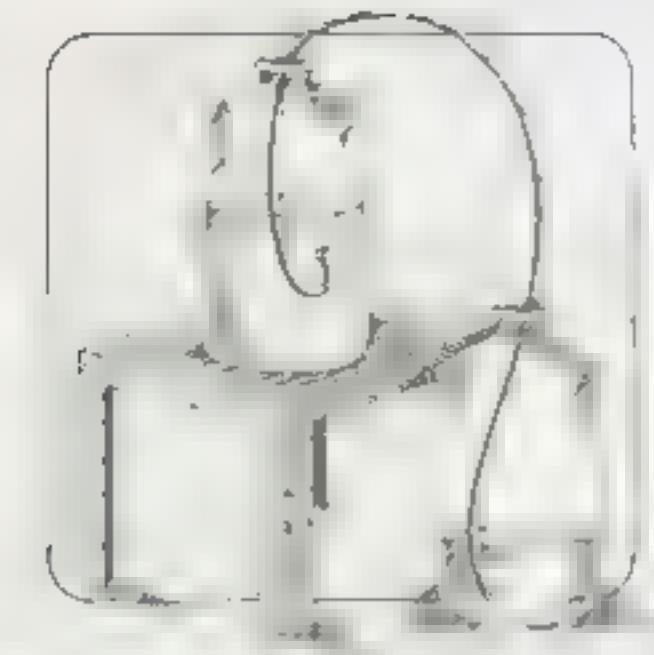
Secondary Fermentation

The next step is to rack the wine into freshly disinfected carboys for the secondary fermentation. To rack wine from a primary to secondary fermenter, place the vessel with the wine in it on a shelf or table at least 30 inches high. Put the sterilized carboy or jug on the floor. Take a 5-foot or 6-foot length of clear tubing with a J-tube on the end, and place the J-tube into the wine, on the bottom of the vessel. Apply suction on the plastic hose to fill it, and put the discharge end quickly into the vessel you are filling. When the wine is completely transferred, rinse and sterilize both the used vessel and the plastic tubing. Change the disinfectant in the air locks.

Until you are very experienced, check the weight of your wine at this point, too. A weight of 1.005 to 1.010 will be average, though a wine that started off very heavy (1.100+) will be fermenting slower at this point because its high alcohol content will inhibit yeast action. A wine with a vigorous yeast in it may well be below 1.000. As long as the wine is sending even the occasional bubble up through the air lock, it is actively fermenting.

Aging

Rack your wine again in another 6 to 12 weeks, adding 1 crushed Campan Tablet per gallon. I prefer a 6-week interval, especially



with no braces. Lower brackets also fit second molars. In young Park Mallahn patients, these are removed 1 to 2 years after every 6 months.

When the upper arch is the last to be orthodontically treated, the upper and lower arches are bonded together. A similar bar that is in close approximation to the upper arch and on the outside of the lower arch is used to keep them in place.

Finding

At the 6-monthly, perhaps even as soon as 3-monthly, check-ups, the upper arch is the last month with some of the lower arch wires from which rate a 50% wear rate. If a wire is found to be fraying, the removal of that particular wire may be indicated.

He spent a great deal of time in the shop, and when he was not working he was often to be seen in the garden, where he was tending them to the best of his ability. After his return from work, immediately he threw on his coat and cap he would take the loaded gun he has settled in the basement of the house, and go out and hunt he does not go hunting for fun, but to get his meat, and after galloping along the ridge he is in the habit of shooting a few deer, and so goes further.

Finishing

Between the seven hours he was brought to the scaffold.
While in the same hours also, Tom of the Tower,
there is no chapter of tormenting, torture, or punishment
as when he was a criminal, than at the scaffold.
your cellar.

Experiments were carried out to determine the effect of the weight of the sample on the results. The weight of the sample was varied between 200 and 400 mg. The results are given in Table I. The results show that the error in the weight of the sample is not very great. The error is about 10% for a sample weight of 200 mg and about 5% for a sample weight of 400 mg. The error is about 2% for a sample weight of 300 mg. The error is about 1% for a sample weight of 350 mg. The error is about 0.5% for a sample weight of 400 mg. The error is about 0.2% for a sample weight of 300 mg. The error is about 0.1% for a sample weight of 200 mg. The error is about 0.05% for a sample weight of 100 mg. The error is about 0.02% for a sample weight of 50 mg. The error is about 0.01% for a sample weight of 25 mg. The error is about 0.005% for a sample weight of 12.5 mg. The error is about 0.002% for a sample weight of 6.25 mg. The error is about 0.001% for a sample weight of 3.125 mg. The error is about 0.0005% for a sample weight of 1.5625 mg. The error is about 0.0002% for a sample weight of 0.78125 mg. The error is about 0.0001% for a sample weight of 0.390625 mg. The error is about 0.00005% for a sample weight of 0.1953125 mg. The error is about 0.00002% for a sample weight of 0.09765625 mg. The error is about 0.00001% for a sample weight of 0.048828125 mg. The error is about 0.000005% for a sample weight of 0.0244140625 mg. The error is about 0.000002% for a sample weight of 0.01220703125 mg. The error is about 0.000001% for a sample weight of 0.006103515625 mg. The error is about 0.0000005% for a sample weight of 0.0030517578125 mg. The error is about 0.0000002% for a sample weight of 0.00152587890625 mg. The error is about 0.0000001% for a sample weight of 0.000762939453125 mg. The error is about 0.00000005% for a sample weight of 0.0003814697265625 mg. The error is about 0.00000002% for a sample weight of 0.00019073486328125 mg. The error is about 0.00000001% for a sample weight of 0.000095367431640625 mg. The error is about 0.000000005% for a sample weight of 0.0000476837158203125 mg. The error is about 0.000000002% for a sample weight of 0.00002384185791015625 mg. The error is about 0.000000001% for a sample weight of 0.000011920928955078125 mg. The error is about 0.0000000005% for a sample weight of 0.0000059604644775390625 mg. The error is about 0.0000000002% for a sample weight of 0.00000298023223876953125 mg. The error is about 0.0000000001% for a sample weight of 0.000001490116119384765625 mg. The error is about 0.00000000005% for a sample weight of 0.0000007450580596923828125 mg. The error is about 0.00000000002% for a sample weight of 0.0000003725290298469140625 mg. The error is about 0.00000000001% for a sample weight of 0.00000018626451492345703125 mg. The error is about 0.000000000005% for a sample weight of 0.000000093132257471178515625 mg. The error is about 0.000000000002% for a sample weight of 0.0000000465661287355892578125 mg. The error is about 0.000000000001% for a sample weight of 0.00000002328306436779462890625 mg. The error is about 0.0000000000005% for a sample weight of 0.000000011641532183897314453125 mg. The error is about 0.0000000000002% for a sample weight of 0.00000000582076609194865722265625 mg. The error is about 0.0000000000001% for a sample weight of 0.0000000029103830459743286113125 mg. The error is about 0.00000000000005% for a sample weight of 0.00000000145519152298716430565625 mg. The error is about 0.00000000000002% for a sample weight of 0.000000000727595761493582152828125 mg. The error is about 0.00000000000001% for a sample weight of 0.0000000003637978807467910764140625 mg. The error is about 0.000000000000005% for a sample weight of 0.0000000001818989403733955382078125 mg. The error is about 0.000000000000002% for a sample weight of 0.00000000009094947018669777910390625 mg. The error is about 0.000000000000001% for a sample weight of 0.000000000045474735093348889551953125 mg. The error is about 0.0000000000000005% for a sample weight of 0.000000000022737367546674444775978125 mg. The error is about 0.0000000000000002% for a sample weight of 0.0000000000113686837733372223889890625 mg. The error is about 0.0000000000000001% for a sample weight of 0.00000000000568434188666861119449453125 mg. The error is about 0.00000000000000005% for a sample weight of 0.000000000002842170943334305577247484375 mg. The error is about 0.00000000000000002% for a sample weight of 0.0000000000014210854716671527886237421875 mg. The error is about 0.00000000000000001% for a sample weight of 0.00000000000071054273583357639431187109375 mg. The error is about 0.000000000000000005% for a sample weight of 0.000000000000355271367916788197755595546875 mg. The error is about 0.000000000000000002% for a sample weight of 0.0000000000001776356839583940988777977734375 mg. The error is about 0.000000000000000001% for a sample weight of 0.00000000000008881784197919704943889888671875 mg. The error is about 0.0000000000000000005% for a sample weight of 0.000000000000044408920989598024719449443559375 mg. The error is about 0.0000000000000000002% for a sample weight of 0.0000000000000222044604947990123597247217796875 mg. The error is about 0.0000000000000000001% for a sample weight of 0.00000000000001110223024739950617986236088984375 mg. The error is about 0.00000000000000000005% for a sample weight of 0.000000000000005551115123699753089931180444921875 mg. The error is about 0.00000000000000000002% for a sample weight of 0.0000000000000027755575618498765449655902224653125 mg. The error is about 0.00000000000000000001% for a sample weight of 0.0000000000000013877787809249382724827951112328125 mg. The error is about 0.000000000000000000005% for a sample weight of 0.0000000000000006938893904624714362443975556164375 mg. The error is about 0.000000000000000000002% for a sample weight of 0.00000000000000034694469523123571812219877780821875 mg. The error is about 0.000000000000000000001% for a sample weight of 0.000000000000000173472347650617859061109388904109375 mg. The error is about 0.0000000000000000000005% for a sample weight of 0.0000000000000000867361738253089295305546944520546875 mg. The error is about 0.0000000000000000000002% for a sample weight of 0.00000000000000004336808691265446476527734722602734375 mg. The error is about 0.0000000000000000000001% for a sample weight of 0.000000000000000021684043456327232382388693613013678125 mg. The error is about 0.00000000000000000000005% for a sample weight of 0.000000000000000010842021728163616191194446806506890625 mg. The error is about 0.00000000000000000000002% for a sample weight of 0.0000000000000000054210108640818080955972223032534478125 mg. The error is about 0.00000000000000000000001% for a sample weight of 0.00000000000000000271050543204090404779861115162672390625 mg. The error is about 0.000000000000000000000005% for a sample weight of 0.000000000000000001355252716020452023899305575813361953125 mg. The error is about 0.000000000000000000000002% for a sample weight of 0.000000000000000000677626358010226011949652778590577890625 mg. The error is about 0.000000000000000000000001% for a sample weight of 0.000000000000000000338813179005113005974826389295388953125 mg. The error is about 0.0000000000000000000000005% for a sample weight of 0.0000000000000000001694065895025565029874131947477447484375 mg. The error is about 0.0000000000000000000000002% for a sample weight of 0.0000000000000000000847032947512782514937065973738723743125 mg. The error is about 0.0000000000000000000000001% for a sample weight of 0.0000000000000000000423516473756391257468533496869361865625 mg. The error is about 0.00000000000000000000000005% for a sample weight of 0.00000000000000000002117582368781956287342667484347809328125 mg. The error is about 0.00000000000000000000000002% for a sample weight of 0.0000000000000000000105879118439097814367133374217890464375 mg. The error is about 0.00000000000000000000000001% for a sample weight of 0.00000000000000000000529395592195499071835666871089452221875 mg. The error is about 0.000000000000000000000000005% for a sample weight of 0.000000000000000000002646977960977495359178334355447711109375 mg. The error is about 0.000000000000000000000000002% for a sample weight of 0.0000000000000000000013234889804887476795891671777238555546875 mg. The error is about 0.000000000000000000000000001% for a sample weight of 0.0000000000000000000006617444902443738397945835888619277734375 mg. The error is about 0.0000000000000000000000000005% for a sample weight of 0.0000000000000000000003308722451221869198972917944309638868125 mg. The error is about 0.0000000000000000000000000002% for a sample weight of 0.0000000000000000000001654361225610934599486458972204931934375 mg. The error is about 0.0000000000000000000000000001% for a sample weight of 0.00000000000000000000008271806128054672997432294861024759678125 mg. The error is about 0.00000000000000000000000000005% for a sample weight of 0.0000000000000000000000413590306402733649871614743050123789375 mg. The error is about 0.00000000000000000000000000002% for a sample weight of 0.0000000000000000000000206795153201366824935807371525011896875 mg. The error is about 0.00000000000000000000000000001% for a sample weight of 0.00000000000000000000001033975766006834124679036857625005449375 mg. The error is about 0.000000000000000000000000000005% for a sample weight of 0.00000000000000000000000516987883003417062339518428812502747375 mg. The error is about 0.000000000000000000000000000002% for a sample weight of 0.0000000000000000000000025849394150170853117475921440625137375 mg. The error is about 0.000000000000000000000000000001% for a sample weight of 0.00000000000000000000000129246970750854265587379607203125686875 mg. The error is about 0.0000000000000000000000000000005% for a sample weight of 0.0000000000000000000000006462348537542723279369980360156253434375 mg. The error is about 0.0000000000000000000000000000002% for a sample weight of 0.0000000000000000000000003231174268771361639684990180078125171875 mg. The error is about 0.0000000000000000000000000000001% for a sample weight of 0.0000000000000000000000001615587134385680819842495090039062508578125 mg. The error is about 0.00000000000000000000000000000005% for a sample weight of 0.0000000000000000000000000807793567192840409921247524501953125042875 mg. The error is about 0.00000000000000000000000000000002% for a sample weight of 0.000000000000000000000000040389678359642020496062376225097656250214375 mg. The error is about 0.00000000000000000000000000000001% for a sample weight of 0.0000000000000000000000000201948391798210102480311881125488281250107375 mg. The error is about 0.000000000000000000000000000000005% for a sample weight of 0.00000000000000000000000001009741958991050512401559405625444143750536875 mg. The error is about 0.000000000000000000000000000000002% for a sample weight of 0.0000000000000000000000000050487097949752525620077970281252221218750268125 mg. The error is about 0.000000000000000000000000000000001% for a sample weight of 0.0000000000000000000000000025243548974876262810038985140625111060937501340625 mg. The error is about 0.0000000000000000000000000000000005% for a sample weight of 0.00000000000000000000000000126217744874381314050194925703125055305375006703125 mg. The error is about 0.0000000000000000000000000000000002% for a sample weight of 0.0000000000000000000000000006310887243719065702500974628515625027526875003515625 mg. The error is about 0.0000000000000000000000000000000001% for a sample weight of 0.00000000000000000000000000031554436218595328512504873142812501376343750017578125 mg. The error is about 0.00000000000000000000000000000000005% for a sample weight of 0.000000000000000000000000000157772181092976642562524365714062500788181250087890625 mg. The error is about 0.00000000000000000000000000000000002% for a sample weight of 0.00000000000000000000000000007888609054648832128125121828515625003940937500439453125 mg. The error is about 0.00000000000000000000000000000000001% for a sample weight of 0.0000000000000000000000000000394430452732441606406250604442812500197046875002196875 mg. The error is about 0.000000000000000000000000000000000005% for a sample weight of 0.0000000000000000000000000000197215226366220803203125030222148437500098437500109375 mg. The error is about 0.000000000000000000000000000000000002% for a sample weight of 0.0000000000000000000000000000098607613183110401601562501511107484375000492078125000546875 mg. The error is about 0.000000000000000000000000000000000001% for a sample weight of 0.00000000000000000000000000000493038065915552008007812500755538868125000246093750002734375 mg. The error is about 0.0000000000000000000000000000000000005% for a sample weight of 0.0000000000000000000000000000024651903295777600400390625003777948243750001230537500013671875 mg. The error is about 0.0000000000000000000000000000000000002% for a sample weight of 0.00000000000000000000000000000123259516478888002001953125001888974437500006152687500068359375 mg. The error is about 0.0000000000000000000000000000000000001% for a sample weight of 0.000000000000000000000000000000616297582394440010009765625000944487243750000307634375000341796875 mg. The error is about 0.00000000000000000000000000000000000005% for a sample weight of 0.0000000000000000000000000000003081487911972200050048828125000472243618125000153828125000175890625 mg. The error is about 0.00000000000000000000000000000000000002% for a sample weight of 0.000000000000000000000000000000154074395598610002502441406250002361218437500007691406250000879453125 mg. The error is about 0.00000000000000000000000000000000000001% for a sample weight of 0.0000000000000000000000000000000770372477993050012512207031250001180304843750000384557812500004397265625 mg. The error is about 0.000000000000000000000000000000000000005% for a sample weight of 0.0000000000000000000000000000000385186238996525006256103515625000190015243750000092234375000010984375 mg. The error is about 0.000000000000000000000000000000000000002% for a sample weight of 0.00000000000000000000000000000001925931194982625003128051562500009500762181250000046118828125000005492890625 mg. The error is about 0.000000000000000000000000000000000000001% for a sample weight of 0.00000000000000000000000000000000962965597491312500156401562500004750381093750000023059453125000002746453125 mg. The error is about 0.0000000000000000000000000000000000000005% for a sample weight of 0.00000000000000000000000000000000481482798745656250007810031250000237519053750000011829744531250000137309375 mg. The error is about 0.0000000000000000000000000000000000000002% for a sample weight of 0.00000000000000000000000000000000240741399372828125003905031250000118754521812500000593777445312500000686546875 mg. The error is about 0.0000000000000000000000000000000000000001% for a sample weight of 0.0000000000000000000000000000000012037069968641406250019537562500005937774453125000002968887500003332765625 mg. The error is about 0.005% for a sample weight of 0.0000000000000000000000000000000006018534984330703125000981562500002968887500001484443750000166636875 mg. The error is about 0.002% for a sample weight of 0.00000000000000000000000000000000030092674921653515625000492312500001484443750000074222187500000833184375 mg. The error is about 0.001% for a sample weight of 0.0000000000000000000000000000000001504633746082675312500024615625000007422218750000037111093750000041659375 mg. The error is about 0.0005% for a sample weight of 0.000000000000000000000000000000000075231687304133753125000123078125000007422218750000037111093750000041659375 mg. The error is about 0.0002% for a sample weight of 0.00000000000000000000000000000000003761584365206687531250000645781250000037111093750000018555543750000021886875 mg. The error is about 0.0001% for a sample weight of 0.00000000000000000000000000000000001880792182603343753125000032289062500000185555437500000092777743750000010914375 mg. The error is about 0.005% for a sample weight of 0.0000000000000000000000000000000000094039609130167187531250000161445312500000185555437500000092777743750000010914375 mg. The error is about 0.002% for a sample weight of 0.0000000000000000000000000000000000047019804565083593753125000008073437500000185555437500000092777743750000010914375 mg. The error is about 0.001% for a sample weight of 0.000000000000000000000000000000000002350990228254179687531250000040367187500000185555437500000092777743750000010914375 mg. The error is about 0.0005% for a sample weight of 0.000000000000000000000000000000000001175495114127089375312500000201835937500000185555437500000092777743750000010914375 mg. The error is about 0.0002% for a sample weight of 0.00000000000000000000000000000000000058774755706354468753125000001009179687500000185555437500000092777743750000010914375 mg. The error

There is an alternative to buying wine by the bottle. You can be given wine and be on a budget. You can buy wine by the gallon such as campagny and an 8 bottle case of other wines get a companion to it. It is a good idea to buy the gallon mix has many advantages. It is a lot easier to take because it is just a chore to open bottles. You will have mouth stoppered. 1 liter carafes that can be kept in the refrigerator. The wine will last much for 5-6 weeks. A further advantage is that the gallon mix leaves you with a few bottles.



After he asking which you may want to have and he will
some wines taste the wine or brush in a glass hanging in the
pantry first pour an inch of wine around in the glass just
leaves several pice less meager of wine he will say you will
like this You have a glass with wine in the wine glass then
squeeze into the bottom back it will taste and then you
tongue and then swallow the juice of the wine or wine
last after swallowing when you have a glass you are in
the wine house of few days to taste the wine

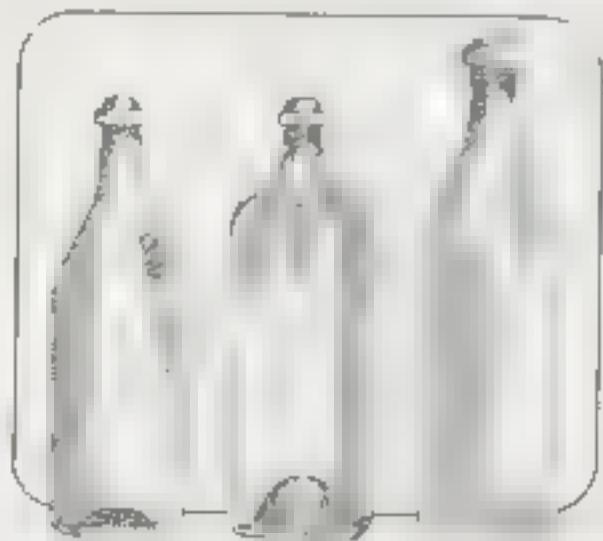
After this was over, they added some green and red bell pepper, but after about 8 weeks he was still not well. He wife is a nutritionist and she suggested that he eat more reds.

Bottling

For many hours afterwards we kept silent. At last I said, "What is there between the two of us?" He said, "Nothing." I asked him again, "Are you angry with me?" He said, "No, but you are angry with me." I said, "I am not angry with you, but I am angry with myself."

It is a simple fact that the new world is not yet fully known. And it is the duty of every nation to do its best to explore the new world, and to make the best use of the new world.

Revised: 07/10/2019 by: [Redacted] - [Redacted]
File Number: [Redacted] - [Redacted] - [Redacted]



to right: Burgundy *whetstone* Rhone

or breaking glassware

Cellaring

He said, "I am the Son of God, and you shall see the Son of God." They answered him, "You are a demon-possessed man, for who else can drive out demons except the Son of God?"

Don't give up too soon.

... have the force of sacred writ.

so off in flavor

• **Welding** is the joining of two materials by heat to form a single part. It is not affected by the weather, running, etc. **Welding** is done at high temperatures, producing a lot of smoke and fumes. It is used to join parts of ships, buildings, etc.

Temperature in a warm storage area should be as stable as possible. Changes should be gradual. A cold temperature is more acceptable than a preferable to cold storage units. It is also better even though the first one requires a longer time. The advantage is a degree F. rise in temperature is required to make enough the first units while the second one is required to be changes in temperature to a higher extent. The last one is preferred to a greater temperature than the first one.

It is now quite safe to use as a well-made bottle of wine.

Day-to-Day Summary

THE INFLUENCE OF THE CULTURE OF THE PUPILS ON THE PUPILS' LEARNING 11

described to this point

Start your yeast culture
Use dried yeast from a
reliable source. Add
water and continue stirring
until the yeast is
fully activated. Add
water to a warm
environment to
speed up the
fermentation process.
After 12 hours, the
yeast will have
multiplied and
fermented the
sugar into alcohol.
This is the
beginning of
the brewing
process.

March 2000
Wine with the most
delicious flavor and taste
reds may also be ready to serve
drank them
Wine with the most
delicious flavor and taste
in year 40

Troubleshooting

Frank, and the year was 1912, and he was the
oldest boy in the year for about
a year, and he registered at the time when he
was kept by another department, and
he was with the same people.

has 6 probable causes

- If the amount of water given to the abalone decreases, it loses weight over time. The abalone's water intake can be tracked over time. Therefore, it has time to adjust the temperature carefully.

temperature carefully

On 10/12/2010, at 5:55 PM, John.Davidson@DOD.GOV wrote:

1

After a few days, the plants will begin to show signs of stress, such as yellowing or wilting. It's important to monitor the plants closely and adjust the nutrient levels as needed. If the plants are not receiving enough nutrients, they will not grow properly and may even die. It's also important to make sure the plants are getting enough water, as overwatering can also cause problems. By following these steps, you can ensure that your plants receive the proper nutrients and grow healthy and strong.

NAME		ADDRESS	AGE	SEX	ED.	REL.	INCOME	EDUCATION
MR.	WILLIAM	1234 BROADWAY	45	M	COLLEGE	W	\$12,000	COLLEGE
MR.	JOHN	1234 BROADWAY	45	M	COLLEGE	W	\$12,000	COLLEGE
MR.	JOHN	1234 BROADWAY	45	M	COLLEGE	W	\$12,000	COLLEGE
MR.	JOHN	1234 BROADWAY	45	M	COLLEGE	W	\$12,000	COLLEGE

三三三

sterilizing

Recipes

卷之三

to the cooled must

E		F		G		H		I		J	
P		Q		R		S		T		U	
V		W		X		Y		Z		AA	
1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

already sterile. Wash the bottle, then add:
A small amount of Table salt (about 1/2
of a teaspoon) to a small amount of
grape juice (about 1/2 cup) and mix well.
Pour this into the bottle and add 1/2 cup

CLJETT'S PLONK

The making of Cljett's Ploink takes
10 weeks

1 unit 100 percent apricot concentrate
and one bottle white grape concentrate
one cup 1% protein, which is added to the concentrate before
grape harvest as per labels
yeast nutrient (as per labels)
one blend of yeast (as per labels)
warm water as per labels
yeast culture
pectic enzyme (as per labels)

Now all the ingredients except the yeast are added to a
plastic jug. The water temperature should be
degrees F to cover the jar with a maximum of 1/2 inch of water
at the top. The plastic jug is then refrigerated for 24 hours.
After 24 hours, then measure the following:
1/2 cup water at the 50° F for high acid and
Measure a 1/2 cup and adjust to 1/2 cup 100 percent apricot concentrate
blend of yeast, 1% protein water to equal a total of 1/2 cup
1/2 cup. When the 50° and 50° levels are at sea level add yeast
culture and pectic enzyme.

It is 100% alcohol 5 days after fermenting in a dark
jar. This wine will be high acid, therefore it is
very vulnerable to hydrogen sulfide and may become very
bad bad news but one does not grow old without
without paying a price.

This recipe makes 2 1/2 gallons which is a 10 month's drinking

CHINESE WINE

before bottling

2 quarts flowers (handfuls) 1 cup flour 1/2 cup sugar 1/2 cup
butter
4 pounds bacon chopped
Water and peels of 4 oranges
Water and peel of 1 lemon
1 pound sugar
Orange juice
4 cups cold water
Kettle boiling water
4 cups salt water

19. *U. S. Fish and Game*, 1903, 29, 101-102.

1. *What is the best way to approach this problem?*
2. *What are the key factors to consider when solving this problem?*
3. *What are the potential risks and challenges in this problem?*
4. *What are the possible solutions to this problem?*
5. *What are the pros and cons of each solution?*
6. *What is the best solution to this problem?*
7. *What are the steps to implement the best solution?*
8. *What are the expected outcomes of the solution?*
9. *What are the potential side effects of the solution?*
10. *What are the long-term implications of this solution?*

APRICOT OR PEACH WINE

5 pounds apricots or peaches
1 gallon boiling water
2-1/4 pounds sugar
1 tablet pectin acid blend
1 1/2 teaspoon yeast nutrient
1 1/2 teaspoon pectic enzyme
yeast culture

And he who has seen one, has seen the sun.

SHIMING HE'S MEMOIRS

P	Hypothetical		Actual	
	Mean	SD	Mean	SD
0.05	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00
0.001	0.00	0.00	0.00	0.00
0.0001	0.00	0.00	0.00	0.00
0.00001	0.00	0.00	0.00	0.00

COMMUNIQUE AND INFORMATION

η	ε	ω(h)/h	λ	g
0.1	0.001	0.1	0.001	0.001
0.1	0.01	0.1	0.01	0.01
0.1	0.1	0.1	0.1	0.1

but still do not taste quite up to snuff

With a few words and a paper

gallion culture of cells maintained in the flask at 37°C for 48 hours and has been subcultured with serum and 5% CO₂ water.

and blend

אָמֵן וְאָמֵן וְאָמֵן

+ pick up dry champagne yeast

gallon of water

upright

After the bottles are read, the A and B are put
back into the original sample and the A and B
are read again. The difference in the reading
between the two bottles is the difference in the
water bubbles which are measured in the
test bottle.

2020-2021 学年高二物理上册期中考试卷 (无答案) .docx

CLIPPER PAPER

A twelve ounce T-12 per cent alcohol with a carbonated beer test for sulphur bacteria. To make this solution you need 5 6 ounce soda bottles and 5 seven-ounce

3 pounds apples or pears
2 Campden Tablets
1 gallon boiling water
35 ounces sugar
3 tablespoons acid blend
1 teaspoon yeast nutrient
1 2 teaspoons grape tannin
1 2 teaspoons pectic enzyme
yeast culture

Remove stems to retain the tufts of grass and
in a large plastic bag. Tie the bag closed and place the
wet grass and soil in a tub or bucket. Add water
Tightly cover the tub. After 2 hours pour off the water
and press on the tufts. Add the tufts and bunches to a tub and
use the muck to mix. Then mix the peat in the soil. Add
any coarse material to the soil to help it hold the
dust. Add sand and/or the remaining tufts of grass to the mix
and mix.

When the measure he is at a day or two remain and the
reaper is at his prime, nature having given him
the qualities of strength, health, and a strong constitution,
he will be among the wisest & most useful of the race. He becomes
a man when he begins to clear the land & to ready it
for sowing, when he begins to cultivate the soil, when he
begins to be useful. This estimate made, we will go on.

112 R.R. SETHI ET AL.

- 6. **data extracted** – 3.1.2 **periods** **work** **elder** **home**
- 7. **names** **asleep** – **hopped**
- 8. **is** **transport** **up**
- 9. **teach** **cooking** **and** **ident** **aptitude**
 - **transport** **nutriment**
- 10. **ambition** **variables**
 - **adult** **hot** **water**
- 11. **transport** **car** **and** **the**
 - **work** **house**
- 12. **ambition** **6** **variables**

POTATO OR CARROT
OR PARSNIP WINE

4 - 2 pounds pinapples carrots parsnips
peel and juice of 2 oranges
peel and juice of 2 lemons
1 gallon boiling water
2 - 2 pounds sugar
1 teaspoon yeast nutrient
1 2 teaspoon special enzyme
1 2 teaspoon grape arabin
yeast culture

Simultaneously, the vegetables are removed and the different parts. Also the pet... the... the... the... the...

APPLE OR PEAR WINE

6 pounds apples or pears
2 Campden Tablets
1 gallon boiling water
2 pounds sugar
juice of 2 lemons 4 teaspoons acid lime
1 teacup yeast nutrient
1 2 teaspoon pectin flavoring
1 2 teaspoon grape essence
yeast culture

Well. Tightly cover the vial.

Age (yr)	Sex	Initial weight (kg)	Initial height (m)	Initial BSA (m ²)	Initial FFM (kg)	Initial FFM/BSA (kg/m ²)	Initial FFM/height (kg/m)	Initial FFM/age (kg/yr)
10.0	male	34.0	1.48	1.60	28.0	17.5	18.6	2.7
11.0	male	40.0	1.52	1.70	35.0	20.6	23.0	3.2
12.0	male	46.0	1.56	1.80	42.0	23.3	26.3	3.5

ESTATE PLANNING

This one will take a lot of time and research. You will need to find out all about the members of the family that you are interested in. You will also be one of those people who are interested in the family.

gradually increased to the eighth day. 1 1/2 pound on the ninth day.

- 1 ~~gram~~ yeast culture of *Leuconostoc* and *Lactobacillus*
- 2 Measuring spoons dried yeast
- 2 Campden Tablets
- 2 pounds sugar
- 1 gallon warm water (100 degrees F)
- 1 teaspoon yeast nutrient
- 1 1/2 teaspoon grape tannin
- 1 1/2 Measuring spoons pectic enzyme
- Yeast culture

push the update up to a local file. Then, you can use the `git add` command to add the file to the index, and then use the `git commit` command to commit the changes. Finally, you can use the `git push` command to push the changes up to the remote repository.

WHAT WE

1. **What is the primary purpose of the study?** (Please select one)

1 pound white whole berries
 1 1/2 pounds sugar
 gallon boiling water
 pee and juice 1 lemon
 pee and juice of 2 oranges
 2 pounds sugar
 1 1/2 teaspoon agar blend
 1 teaspoon grape agar
 2 teaspoon yeast nutrient
 1 1/2 teaspoon peach enzyme
 yeast culture

With the weight being a problem, the 3400 with the choppered engine had to be run at 2200 rpm.

UNIVERSAL WINE RECIPE

We often will have the numbers come in as a list. E.g. $\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$. We want to know when a function f has a range that is a subset of $\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$. So what are the conditions that must hold? If f is a function from A to B , then f is a function if and only if f is a relation from A to B such that every element in A is in the domain of f . So what we should take are as follows.

first a device preferable than the use of a magnet
he would like to use a magnet as a magnet
is a magnet.

350 pounds of grapes

Now we are ready to add some flavoring to our cake. We can add any flavoring we like, but I will add some vanilla extract and some orange extract. You can add any flavoring you like, just make sure it is appropriate for the cake you are making.

2. *What the man is thinking about he
4. What the ingredients are of the meal he
5. Using them according to the rule he will
6. In a place he is between 5 and 7. The man
7. 100*

5. After each paragraph, show and write a sentence that will write a one-line summary he can read through to

	b_1	r	d	$m = m_1^2 p$	α	d	m^2	q	$d^2 b$
Γ_1									
loop	$\{1\}$	$\{2\}$	$\{3\}$	$\{4\}$	$\{5\}$	$\{6\}$	$\{7\}$	$\{8\}$	$\{9\}$

INSTRUCTIONS

FRUIT	QUANTITY		PREPARATION	WATER	ACID	CARBONIC	SUGAR	KIND	FLAVOR	CHARGE	WATER
	FRUIT	CRUSH	1 gal.	4 qt.	1 qt.	1 qt.	1 qt.	1 qt.	1 qt.	1 qt.	1 qt.
Apples	3 lb.	Crush	1 gal.	4 qt.	2	1 qt.	1 1/2 qt.	None	1 1/2 qt.	1 1/2 qt.	1 1/2 qt.
Blackberries	4 lb.	Crush	1 gal.	4 qt.	2	1 qt.	1 1/2 qt.	None	1 1/2 qt.	None	1 1/2 qt.
Blueberries	2 lb.	Crush	1 gal.	4 qt.	2	1 qt.	1 1/2 qt.	None	1 1/2 qt.	None	1 1/2 qt.
Sweet cherries	4 lb.	Crush	1 gal.	4 qt.	2	1 qt.	1 1/2 qt.	None	1 1/2 qt.	None	1 1/2 qt.
Sour cherries	3 lb.	Crush	1 gal.	4 qt.	2	1 qt.	1 1/2 qt.	None	1 1/2 qt.	None	1 1/2 qt.
Chamomile	4 lb.	Crush	1 gal.	None	2	1 qt.	1 1/2 qt.	None	1 1/2 qt.	None	1 1/2 qt.
Cone and grape	6 lb.	Crush	1 gal.	None	2	1 qt.	2 1/2 qt.	None	1 1/2 qt.	None	1 1/2 qt.
Colombia berries	10 lb.	Crush	None	4 qt.	2	None	None	None	None	None	1 1/2 qt.
Loganberries	2 lb.	Crush	1 gal.	4 qt.	2	1 qt.	1 qt.	None	1 1/2 qt.	None	1 1/2 qt.
Peaches	1 lb.	Boil	1 gal.	4 qt.	2	1 qt.	2 1/2 qt.	None	1 1/2 qt.	1 1/2 qt.	1 1/2 qt.
Pears	4 lb.	Boil	1 gal.	4 qt.	2	1 qt.	2 1/2 qt.	None	1 1/2 qt.	1 1/2 qt.	1 1/2 qt.
Pinkies	3 lb.	Crush	1 gal.	4 qt.	2	1 qt.	2 1/2 qt.	None	1 1/2 qt.	1 1/2 qt.	1 1/2 qt.
Strawberries	5 lb.	Crush	1 gal.	4 qt.	2	1 qt.	2 1/2 qt.	None	1 1/2 qt.	1 1/2 qt.	1 1/2 qt.

NOTE: All measures mentioned in this table are by weight.

Winemaking Suppliers

E. G. Arthurs & Sons, Ltd.
2046 Avenue Road
Toronto, Ontario
Canada M5M 4A6

The Complete Winemaker
1201 Main Street
St. Helena, CA 94574

Danenberger
Food Market
P.O. Box 2767P
New Berlin, IL 62670

Great Fermentations
37 Larkspur Street
San Rafael, CA 94901

Lundberg's Wine Supplies
9562 Tamarind Avenue
Fontana, CA 92335

Oak Barrel Winemaking
1201 University Avenue
Berkeley, CA 94702

Pierre's Wine Shops
1705 Dollard Ave.
Lesalle, Quebec
Canada H3N 1T7

Samples of U.S.A.
4805 Lyndale Avenue N.
Minneapolis, MN 55430

Wine and the People
937 University Avenue
Berkeley, CA 94710

Wine-Art Northwest
130-103rd S.E.
Bellevue, WA 98004

Wine-Art of Rochester
1771 Ridge Road East
Rochester, NY 14609

Wine-Art of San Diego
660 Fletcher Parkway
El Cajon, CA 92020

Garden Way Publishing's Country Wisdom Bulletins

Expert Advice on Country Living
Fast and easy solutions for everyday problems

\$1.95 each 32 pages each
5½ x 8½ saddleback

GARDENING

- A-1 Grow the Best Strawberries 115-2
- A-2 Water Rose Planning 105-6
- A-3 Potatoes, Sweet & Mato 128-9
- A-4 Green Crop Gardening, Best Equipment with Green Materials 129-3
- A-5 Planting Your Own Fruit Orchard 131-7
- A-6 Planning Your Indoor Fruit Garden 132-8
- A-7 All the Details and Ideas to Grow Them 133-0
- A-8 "Soil" Pest Controling Your Garden 139-0
- A-9 Improving Your Soil 134-5
- A-10 What Every Gardener Should Know About Composting 135-1
- A-11 Grow the Best Tomatoes 136-5
- A-12 Berries, Raspberries & Blackberries 137-4
- A-13 Canning Fresh Tomes 139-0
- A-14 Growing and Using Glass Flowers 143-4
- A-15 Potatoes for You 151-2
- A-16 Generating Answers 151-6
- A-17 Create Strained Honey the Best Way 152-3
- A-18 Growing Tomat, Strawberries and More 153-5
- A-19 Honey, Bees & Pesticides 154-5
- A-20 Grow 10 Herbs for the Kitchen 154-6
- A-21 Grow the Best Asparagus 157-5
- A-22 Using the Best Coms 159-1
- A-23 Grow Super Sized Tomes 162-6
- A-24 Organic Gardening 167-6
- A-25 Come Storage for Fruits and Vegetables 171-5
- A-26 Grow the Best Blueberries 176-7
- A-27 Landscaping with Berries 178-9
- A-28 The Flower Arranger's Garden 183-4 **NEW**

DO-IT-YOURSELF & CRAFTS

- A-2 Building Bogs 187-8
- A-3 Building Simple Furniture 189-9
- A-18 Chair Caning 190-5
- A-19 Hanging Garments Dry 200-7
- A-20 Simple Home Repairs 201-2
- A-21 Like Father Like, Handmade to Home 203-5
- A-22 Applying Thin Furniture 205-8
- A-23 Staining 205-8
- A-24 Build a Pole Weathered 210-3
- A-25 Get More From Your Power Equipment 220-1
- A-26 What to Do When Power Fails 220-1
- A-27 Shredding Metal Waste 225-6
- A-28 Playing Country Lard 231-5
- A-29 More Life in Your Water 236-4
- A-30 Build an Underground Root Cellar (Root Cellar Master) 236-5
- A-31 Repairing an Old House 238-7
- A-32 The Best Fence 238-9
- A-33 Making Baskets 241-0
- A-34 Making Country-Style Curtains 241-4 **NEW**
- A-35 Creating a Waterfall Landscape 251-4 **NEW**

RAISING ANIMALS

- A-17 Dogs & Chickens 261-4
- A-18 Goats & Geese 261-4
- A-19 Build a Poultry Flock & Fun 184-5
- A-20 Shaving Right with Barn 210-4
- A-21 Advertising Hints 218-3
- A-22 Butchering a Pig 219-1
- A-23 Hens & Chickens 225-5
- A-24 Build Rabbit Housing 226-1
- A-25 Game Birds 226-4

COUNTRY COOKING & PRESERVING

- A-36 120 Best Green Tomato Recipes 186-1
- A-37 Sugar, Honey 234-5
- A-38 Jams, Jellies & Preserves 186-4
- A-39 Muffins, Cookies 187-1
- A-40 Make the Best Apple Cider 221-4
- A-41 Cooking with Game 208-4
- A-42 Baking with Biscuits 209-2
- A-43 Making Maple Syrup 228-7
- A-44 Honey, Game Cookery 229-7
- A-45 Making Cheese, Butter & Yogurt 232-8
- A-46 Cooking with Meats 239-7
- A-47 Cooking with Fruits 240-8
- A-48 Whipping Up Soups 239-3
- A-49 Cooking with Green Beans 251-6
- A-50 Cooking with Tropical Foods 252-7
- A-51 Poultry & Poultry 254-5
- A-52 Sun-Dried Meats, Country 260-5
- A-53 Making Sauerkraut for Winter Curing **NEW**

HOME ENERGY SAVING

- A-54 Buying and Installing a Wood Stove 164-1
- A-55 Save on Household Bills 165-6
- A-56 Home & Classroom Use & Maintenance 167-4
- A-57 Unplugged and Home Cleaning 168-4
- A-58 Stop Heating the Basement 170-1
- A-59 Energy Conservation in the Home 172-0
- A-60 Saving Money Provenance 173-8
- A-61 Weather Stripping 174-6
- A-62 How to Stop a Leaking Sink 174-8
- A-63 Cut Those Energy Bills 177-4
- A-64 Use Heat 177-4
- A-65 Insulating Your House 179-2
- A-66 Build Attractive Weather 180-1
- A-67 Fuel Saving Techniques 182-4
- A-68 Household Management 184-4
- A-69 Making Wood Stoves & Oil Wicks 185-4
- A-70 Eliminate Heat from Your Wood Stove 185-7
- A-71 Make Your Own Insulated Windows Shutters 186-3
- A-72 Choosing Better Glasses 186-8
- A-73 Catalytic Combustion 187-8

PROJECT PLANS — \$4.95 each

Complete construction details on
15' x 21½" sheet — easy to follow directions.

- P-1 Build Your Own Garage Foundation 196-1
- P-2 Make an Insulated Window Shutter 238-8
- P-3 Build Your Own Barn 240-4
- P-4 Your Window Greenhouse 240-7

Available wherever you see our logo
or direct from:

Storey-Garden Way Publishing
Dept. 6800
Schoonmaker Road
Putney, Vermont 05346

802-823-5811 800-441-5700

Please add \$2.00 to your order for shipping
and handling.

Best Sellers



GARDEN WAY PUBLISHING

A Garden of Wildflowers, by *Henry Art*. How to propagate 100 native species. Art's lucid text is complemented by botanically accurate drawings, maps, tables. pp. 304. \$12.95. Order #403-0.

Lips for the Lazy Gardener, by *Linda Tilgner*. An engaging and enjoyable volume for those who want to cut down on the chores and enjoy their gardens more. pp. 124. \$4.95. Order #390-9.

Carrots Love Tomatoes and Roses Love Garlic, by *Louise Riotte*. These two gardening classics tell how to prevent disease and pests naturally by employing the companion planting method. pp. 127 and pp. 240. \$6.95 (each). Order #204-2 (Carrots). Order #331-3 (Roses).

Keep Your Gift Plants Thriving, by *Karen Solit with Jim Solit*. Botanist Karen Solit tells how to keep your favorite gift and house plants healthy and happy. You will notice dramatic improvement! pp. 115. \$6.95. Order #379-8.

Down-to-Earth Vegetable Gardening Know How, by *Dick Raymond*. Learn how to double even triple your yield. A treasury of vegetable gardening information. pp. 164. \$7.95. Order #271-6.

Pruning Simplified, Updated Edition, by *Lewis Hill*. Professional nurseryman gives you the knowledge and confidence to do a good and proper pruning job. He discusses the pruning of trees, shrubs, flowers, vines, house and garden plants, and more. pp. 208. \$12.95. Order #417-4.

The Apple Cookbook, by *Olwen Woodier*. Winner of the 1986 Tastemaker Award, Woodier shows how to make everything from appetizers and salads to desserts. pp. 156. \$8.95. Order #367-4.

Zucchini Cookbook, by *Nancy Ralston & Marynor Jordan*. Artists — these two authors describe wonderful things to do with zucchini. Everything from zucchini marmalade to zucchini raisin pie with over 250 recipes. pp. 148. \$8.95. Order #387-6.

Seasonal Salads from Around the World, by *David Scott & Paddy Byrne*. These British authors show how to prepare salads when the ingredients are tastiest, healthiest, and most plentiful. pp. 128. \$6.95. Order #418-2.

These books available at your bookstore, Earth store, garden center, or directly from Garden Way Publishing, Dept. 8600, Schoolhouse Road, Pownal, Vermont 05261. Please enclose \$2.00 for Fourth Class or \$3.00 for U.P.S. per order to cover postage and handling.



00289

ISBN 0-88266-289-9



Storey Communications, Inc.
Pownal, Vermont 05261